2: Underhill E-5 (1931-1935) 1939 NU28 Papago NU28
Pima NU29

the area and at least the house and the red pottery rank with the simplest of the equipment once used there. Far more elaborate developments have taken place in Pimeria and been forgotten and one of the most absorbing questions occupying present day archaeology is the tracing of these developments and the connection with them of the modern Pimans.

PREHISTORY

The whole of Pima and Papago country is dotted with ruins, ranging from small, almost obliterated villages to elaborate communal buildings of several storeys, like that which still stands at Casa Grande. Villages may be found in the open desert[1] but the communal houses are clustered in the valleys of the large streams, the Gila and Salt, while a few are found on the smaller Santa Cruz. The valleys themselves are a network of ancient irrigation canals. The most recent survey reports a hundred and twenty five miles of such canals in the Salt River valley and half as many in the Gila[2] and the oldest of them so far excavated has been dated at 800 A.D.[3]

Until recently, communal houses and canals were thought to have belonged to one culture; a culture obviously so much more elaborate than that of the present Pimans, that it could have no connection with them. But the investigations of Gladwin[4], Woodward[5], and the University of Arizona, make it obvious that there have been two cultures in the area, the earlier, which built the canals, of long duration and the later which built the great houses, short and transitory. The canal building culture has some points in common with that of the modern Pimans and the question of their relation to it is now under debate.

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[1] Huntington, 1914, p. 47.
[2] Haleeth, 1936, p. 42.
[3] Haury, 1936, p. 49.
[4] Gladwin, 1928, 1933. This paper went to press before the publication of Gila Pueblo's extended work on a Gila River site: Excavations at Snaketown, by Harold S. Gladwin, Emil W. Haury, E. B. Sayles, Nora Gladwin. Medallion Papers, XXV, Gila Pueblo, Ariz. 1937. The result is an unnecessarily extended statement on some points, both of history and prehistory, instead of summary and quotation. Our reading of the Spanish sources gives slightly different results from those of the Snaketown report. Nor do we here attempt a complete analysis of Mr. Gladwin's assumption of a Pima-Hohokam relationship which, while a tenable hypothesis, requires more penetrating and thorough work than it has yet received.
[5] Woodward, Arthur, The Grewe Site, mimeographed by Los Angeles Museum.

2: Underhill E-5 (1931-1935) 1939 NU28 Papago NU28
Pima NU29

The bulk of recent work in the area has been done by Gila Pueblo, under the direction of H. C. Gladwin, who with W. J. Gladwin has published a series of papers on the canal building culture, called by him the Red on Buff, from its distinctive pottery and also the Hohokam from the Piman word meaning Vanished People.[1] After a series of surface sherd surveys, made throughout Piman country, the Gladwins conclude that the Red on Buff culture extended from Casa Grande south to Sonora; west almost to the Colorado and east into the valleys of the Santa Cruz and San Pedro, and almost to the New Mexico line.[2] The Hohokam lived at first in earth lodges, with an entrance vestibule or roof opening[3] and then progressed to one story houses of wattle and daub or reinforced adobe, compactly grouped and surrounded by an adobe wall.[4] Their Red on Buff pottery was made with paddle and anvil, and has been called by Kidder "strikingly different from all other groups of pottery in the Southwest".[5] They made also pottery figurines and effigy heads.[6] They used decorated slate palettes for paint mixing[7] and they did work in carved shell.[8]

Another trait differentiating the Hohokam from the Pueblos is that they cremated their dead, placing the unburned bones at first in small pits, then in pottery jars.[9] The skeletal material from Hohokam sites is therefore so very limited that it is impossible to establish any correlation between it and later physical types.

The Gladwins believe that the Hohokam "entered the Southwest as a group and from an exterior source," but, in spite of sherd surveys made in every direction around their habitat, there is no trail to indicate from which direction they came. However, the signs point to their having been already agriculturists, since they chose a desert area necessitating irrigation, rather than the neighboring mountains which would have appealed to a hunting people.[10]

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[1] The word is a reduplicated plural, used by both Pima and Papago to indicate finished, vanished or gone. It was used by Russell (1926, p. 24) and quoted by Huntington (1914, pp. 23, 24). Russell applied the term, as do the Pimans, to the great house builders, while Gladwin uses it to designate the canal builders. Since it has become popularized in the latter sense, it will be so used here.

[2] Gladwin, 1933, pp. 203—204.

[3] Gladwin, 1933, p. 222.

[4] Gladwin, 1928, p. 23; 1929, no. 3, pp. 26—27.

[5] Kidder, 1924, p. 111.

[6] Gladwin, 1933, p. 235.

[7] Kidder, 1924, p. 112.

[8] Kidder, 1924, p. 105.

[9] Gladwin, 1933, p. 248.

[10] Gladwin, 1933, pp. 252, 226.

2:Underhill E-5 (1931-1935)1939 NU28 Papago NU28
Pima NU29

The time of their arrival is also uncertain. There is no tree ring data in Piman country and the dates of Hohokam culture must be established by cross finds of pottery, not always available. Gladwin has divided their history into five periods; Pioneer, Colonial, Sedentary, Classic and Recent. These correspond in character to the five Pueblo periods but are slightly ahead of them in time, for pottery finds show the Colonial to be contemporary with Pueblo I and possibly with Basketmaker III.[1] The last phase of the Colonial is dated by Haury from 700—900 A. D.[2] which would push the Pioneer, the indefinite early period, well back toward the beginning of the Christian era. In Pioneer times, agriculture was already well developed and the inference is that the Hohokam may have been tilling the soil before the Basketmakers. Gladwin, in fact, calls them "the earliest farmers in Arizona."[3]

Their progress continued until about 1300 A. D. and, says Haury, "In the richness of their material attributes and the length of time through which the sequence of their culture's growth can be traced, the Hohokam stand alone in the American Southwest.[4] But between 1300 and 1350, they suffered an invasion of peoples from the Little Colorado pueblos and Flagstaff "whose presence is marked by a distinctive polychrome pottery; the use of stone if possible in wall construction and the custom of inhumation."[5] These were the builders of the great houses who, attracted by the fields and the irrigation systems, placed their settlements on the very sites formerly occupied by the Hohokam. Gladwin's theory is that it was a peaceful invasion, "the two peoples continued to live together and their cultures remained separate and distinct"; the Hohokam continued "to live in one storey houses of pole, brush and clay construction, they went on making the Red on Buff pottery . . . they carved images in shell . . . and they continued to cremate their dead placing the unconsumed remains in Red on Buff redware urns." They also brought their irrigation systems to the point of greatest development. Meantime the Pueblo people "continued to build their multi-storeyed houses, used stone when it was available .. or caliche. They made Gila polychrome pottery, buried their dead in the earth, often under the floors of rooms.[6]

The invasion did not even reach to all parts of the country for, out of fifty-nine sites surveyed, Gladwin found three with no traces of polychrome pottery.[7] And it was brief. Cross finds of pottery

[1] Gladwin, 1933, p. 250.
[2] Haury, 1936, p. 49.
[3] Gladwin, 1933, p. 277.
[4] Haury, 1936, p. 48.
[5] Gladwin, 1929, p. 37.
[6] Gladwin, 1933, p. 251.
[7] Gladwin, 1933, p. 252.

2: Underhill E-5 (1931-1935) 1939 NU28 Papago NU28
Pima NU29

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172

indicate that the great houses were abandoned between 1400 and 1450 A. D.[1] Discussion is still rife as to whether the cause of abandonment was waterlogging of the fields[2] or enemy attacks,[3] and as to the final refuge of the builders. The Pima in 1694, three hundred years at the latest after the exodus had taken place, told their first Jesuit missionary that "the ancestors of Montezuma deserted and depopulated it (Casa Grande) and, beset by the neighboring Apaches, left for the east or Casas Grandes (of Chihuahua) and that, from there they turned toward the south and southwest finally founding the great city and court of Mexico."[4] Pima words for Apache and for enemy being the same, this tradition may have referred to any other warlike tribe as well as the Apache. The tale of the Aztecs, so persistently repeated by the Spaniards, has been as persistently rejected by historians, since the Aztecs were in Mexico City before the great houses of the Gila were built at all. But the suggestion of Chihuahua remains a possible one, with some archaeological support.

The point of importance for this study is the relationship of the modern Pimans to both Hohokam and Puebloan cultures, and on this archaeologists are not all in agreement. Gladwin suggests many likenesses between the Hohokam and the modern Pimans who do, in fact, live on the old sites, use the old canals, build wattle and daub houses and make paddle and anvil pottery. The likeness is most obvious with the Papago "whose pottery shows a definite relationship to prehistoric Red on Buff and whose manner of life appears to be the same as that indicated by Red on Buff settlements of the Sedentary (third) period."[5] An interesting possibility would be that the Papago represent a fringe of the Hohokam which according to the sherds "pushed west and south .... where, owing to unfavorable natural conditions, their development was retarded."[6] This branch had no irrigation[7] and their pottery, instead of developing like the rest, remained set in a local variation.[8] Offering no temptation to invaders, they remained untouched throughout their stay and it is possible that, "the ancient life of the Red on Buff people persists here (in Papago country) suspended in sur-

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[1] Gladwin, 1933, p. 252.
[2] Turney, 1929, pp. 44—45; Halseth.
[3] Russell, p. 26; Bolton, 1936, p. 370.
[4] Bolton, 1936, p. 285.
[5] Gladwin, 1929, No. 4, pp. 70—71.
[6] Gladwin, 1929, No. 4, p. 129.
[7] Gladwin, 1929, No. 4, p. 80.
[8] Gladwin, 1929, No. 4, pp. 129—130.

2:Underhill E-5 (1931-1935)1939 NU28 Papago NU28
Pima NU29

roundings sufficiently adverse to have discouraged intrusion by an alien people less qualified to deal with desert conditions."[1]

This suggestion, rejected by some archaeologists, has much to recommend it. The chief difficulty is that the Papago bury their dead, instead of cremating as the Hohokam did. It is true that they burn a warrior killed by the enemy but so do they burn everything which has touched an enemy, through fear of evil magic. Such fear would preclude their gathering the bones in a jar as did the Hohokam, for the cremation pyre is left as soon as lighted and no one revisits it. Gladwin mentions jars, hidden in the mountains, which might be burial jars but these are, actually, receptacles of fetishes too dangerous to leave near human dwellings. The Papago form of burial, on the other hand, is a primitive one, widely spread among congeners of the Pimans in rocky country. The corpse is seated upright in a rock cranny as often in the Basin, in northern Mexico and with the ancient Hopi. The custom might thus have been learned from Puebloan invaders but might equally well be indigenous.

The house also presents a certain difficulty. The present Papago house, built of wattle and daub or of what Gladwin calls reinforced adobe (adobe smeared on a framework of crossed poles), is indeed a duplicate of late Hohokam houses. But such a house has only been used within the last fifty years and apparently was adopted from Sonora where the Yaqui have used it for some time. The old Papago house, still used for ceremonials, was a dome shaped structure of brush, the floor excavated to 18 inches or two feet. It presents likenesses to the houses of the Mission Indians and the Paiute and also to the old Hohokam pit houses. This was also the Pima house,[2] and if the Pima and Papago are relics of the Hohokam we should have to suppose that they did not pass beyond the earliest stage in house structure, or that they lapsed back into it. Nor did they continue all the Hohokam arts. They do not work in shell and when they dig up, in their fields, the carved frogs or the slate palettes mentioned above, they regard them with the superstitious awe shown by the Navaho toward Pueblo relics. But there are scraps of tradition to support the theory that they have survivors of the Hohokam among them. Russell was told that the Red moiety, among the Pima, represent the old inhabitants of the land, while the White moiety were the invaders,[3] and the present writer heard that the old inhabitants are the speakers of the Huhuhra dialect, who live at the extreme west of Papagueria, just where

[1] Gladwin, 1929, No. 4, p. 130.
[2] Russell, pp. 154—155.
[3] Russell, p. 26.

2:Underhill E-5 (1931-1935)1939 NU28 Papago NU28
Pima NU29

Pa Pi 172 they would have been pushed by intruders. It is true that this western country is more primitive and more conservative than the rest and also that it lacks a ceremony, the Wiikita, proved to be definitely Puebloan in origin. However, the locality has no tradition of cremation beyond that of the enemy victim. Unsolved elements enter into the problem here.

Another possibility is that the Pimans represent a recent invasion of nomads who drove out the great house builders. Gladwin's objection to this is that their perfect adaptation to their desert habitat precludes their having arrived there as late as 1400 A. D. and data in the following pages go to support such a statement. Nomads warlike enough to conquer the great houses would hardly settle down so soon to a life of industrious agriculture such as the Pimans practise, and if the houses were voluntarily abandoned it would be because the fields were unusable, so no other agriculturists would move in. Gladwin also argues that they have no songs to commemorate such a conquest which should be recent enough for great vividness. They have, as a matter of fact, an elaborate saga, describing how they themselves destroyed the houses,[1] but the writer is inclined to think it a late creation, for the Pimans have, at various tin.es, told quite different versions. Besides the Aztec story, they have said that the houses were built by their own ancestors,[2] by foreigners from the north[3] and, even, specifically by the Moqui "because they alone know how to do such things".[4]

Pa Pi 173 173 It seems just possible that *the* Pimas who told such contradictory stories were different groups of Pimas, including some who were actually descendants of the Pueblo invaders or of those who had assumed their culture and some who represented a previous settlement. But, in course of time, the Pimans have evolved a myth which recounts, with topographical detail, how they destroyed the houses, marching through the country from east to west and working magic to crumble the walls of the "sacred houses" or "rain houses" where lived the *sivanyi*, the rain magicians. Granting that such a tale has no ranking as history, it may afford implicit ethnological evidence and, for that reason, we quote a summary of the present Papago version as told by the official narrators.

Elder Brother and Earth Magician, having made human beings, quarrelled and Earth Magician retired with his creations underground. Elder Brother's people, who spoke the same language, remained above. He cared for them until he finally offended them and they killed him. He came to life and went underground to ask

[1] Russell, pp. 226—230.
[2] Bandelier, 1892, p. 464.
[3] Bolton, 1936, p. 370.
[4] Coues, II, pp. 386—387.

2:Underhill E-5 (1931-1935)1939 NU28 Papago NU28
Pima NU29

finds with the past of Pimeria is not clear. Spanish documents may eventually yield more information as to the agricultural people of northern Sonora, now absorbed in the Mexican population. The Opata, and Tepecano who formed one area with the Upper Pimans, should have shared many Hohokam traits possessed by them, perhaps brought them to a higher point. The Lower Pimas, acknowledged by the Upper Pimas to be their kinsmen, present a further problem for they not only had irrigation and colored cotton clothing,[1] but lived in fortified communal houses.[2]

The present study, concerned with ethnology, can offer only such information as is implicit in the extent of Papago likenesses to one region or to another. There have been compiled in appendix II such data as time would permit showing the affiliations of the Papago with northern Mexico, with the Pueblos, the Shoshoneans and their only neighbors who were not Uto-Aztecan, the Yumans. From elements shared with these diverse cultures, the Papago have built a system suited to their life as small groups of peaceful agriculturists, frugal in equipment, informal in organization, intent on hard work and the compelling of the supernatural.

The Pimans as First Seen by the Whites

Between 1450, the latest tree ring date for the abandonment of the Gila by the Pueblo invaders, and 1687, when the first White missionary came, there is a gap in Piman history. At a stone ruin, north of Phoenix, there has been found Gila redware which seems to belong to a date after the departure and in the forests near Prescott there is Red on Buff, in company with black on gray belonging to another people.[3] These are the only pottery finds which point even vaguely to the history of the Hohokam after the invaders had left.

Spanish exploration began, according to tradition, only a hundred years after the exodus but the first travellers if, indeed, they crossed the country at all, left no recognizable account of it. Legend credits Fray Marcos de Niza with passing through the valleys of the Santa Cruz and San Pedro in 1539 though Sauer doubts if he got much above the Mexican border.[4] In 1540, the main Coronado party

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[1] Alegre, 2: pp. 70, 124, 174, 186; Perez, pp. 240—241, 385.
[2] Alegre, 2: pp. 70, 124; Doc. Hist., 4, Series 3, p. 359.
[3] Gladwin, 1933, p. 259.
[4] Sauer, 1932, p. 28.

2: Underhill E-5 (1931-1935)1939 NU28 Papago NU28

765 Still, those who were not afraid went occasionally to the grave, sometimes taking food. Bodies tended to mummify in the dry air and could be seen through the chinks in the masonry looking as in life. One Mexicanized woman told of going for years to look at her dead husband with his red sash and his violin. Another married a second husband and, when she still kept dreaming of the first, the second went to the grave and threatened him: "Leave her alone or else I will dig you up and burn your bones!"

765 177 There is a yearly festival of feeding the dead, which is now thoroughly amalgamated with the Christian feast of All Souls, but which has some likeness to the Aztec custom of sending property to the dead by burning once a year for four years.[1]

766 The feeding and gifts for the dead applied only to those who had been buried. Those who had died on the warpath or at home, from enemy wounds, were cremated, without ceremony. Only purified Enemy Slayers were competent to touch the corpse or his effects, because "it would make them sick". The officiants followed no ritual. They placed the weapons with the body, piled what wood they could find over and under it and burned it as quickly as possible. The kindred wailed but not at the cremation site, "because they were afraid."

Cremation was definitely for the purpose of destroying enemy magic, for it did not take place after accidental shooting at the hunt, nor after murder by a fellow Papago. Only enemy wounds made it necessary. That the enemy need not always be the Apache, is shown by a Spanish account which relates how, when a Jesuit priest was killed by revolting "Pimas" his friendly parishioners burned his body; "this burning is the manner in which the Pimas treat their dead whom they most esteem".[2] It was not the heroism but the enemy magic which necessitated the burning.

766 ●172 The Hohokam, or ancient inhabitants of Papagueria, habitually burned their dead and kept the ashes in jars. If the Papago, as Gladwin[3] suggests are degenerate remains of this ancient culture, their habit of cremation in this one respect, might be a survival of the former practice. But it might equally well be related to the custom of the Aztecs, who disposed of their dead by cremation or burial, according to the manner of death.[4]

768 Immediately after a death of any kind, the family pulled down the house to prevent its being visited by ghosts. The house was a

[1] Sahagun, Seler p. 297.
[2] Velarde section 3, p. 145.
[3] Gladwin 1929.
[4] Sahagun, Seler, pp. 300, 301, 298, 299.

4: Joseph et al D, E-5 (1942-1943) 1949
NU28 Papago NU28

THE DESERT PEOPLE

BEFORE THE WHITE MAN

172 It is probable that man has lived in Papaguería ten thousand or more years. The prehistoric period of his life there ended about A.D. 1400.[1] Until 1941 we knew very little of the chronology of prehistoric Papaguería. There were many theories, based mainly on findings in surrounding areas correlated with isolated sites on the Reservation, but there was no conclusive evidence. These isolated sites were in the open, and the fragile artifacts which could have served as the basis for the identification had long ago disintegrated.

But in 1941 the opening of Ventana Cave in the northwestern part of the Reservation not only revealed the sequence of cultures in that particular section but proved to be one of the most important archeological discoveries in the whole Southwest. It showed that people lived in Papaguería as long ago as we know that anyone lived on the American continent—more than ten thousand years. Animal remains indicate that these people killed and probably ate animals that are now extinct—the bison, sloth, tapir, and four-horned antelope. Their implements were scrapers, choppers, and points. Some unworked marine shell was found and one mano, which indicates that they ground foodstuffs, probably wild seeds. This culture is a combination of two others known to archeologists as the San Dieguito I of the lower Colorado River Basin and the Folsom.

After this very early period for which there is cultural evidence the cave was probably uninhabited for a while, as indicated by a disconformity in the deposits and a change in environmental conditions. Then people came again and seem to have lived there more or less continuously almost to the present time, leaving behind them many tools and artifacts. According to archeologists, the next inhabitants after the original people represented an eastward extension of Californian hunters ancestral to the early Pinto-Gypsum (Armagosa I) culture.

Two hunting and gathering cultures associated with modern animals followed. The first of these ended sometime before 1000 B.C.; the second about A.D. 1. Both are correlated with phases (Chiricahua and San Pedro) of the Cochise culture of southeastern Arizona and the Pinto-Gypsum stages of the California Desert. They are called "hunting and gathering" cultures because their projectile points, scrapers, planes, and bone awls show that these people must have hunted wild animals and prepared them for food and clothing, and various grinding tools indicate that they gathered wild seeds and roots and

1. For information about this period the writer is indebted to Dr. Emil W. Haury, chairman of the Department of Anthropology of the University of Arizona.

4: Joseph et al D, E-5 (1942-1943) 1949
NU28 Papago NU28

ground them for food. However, there is no evidence that any of these peoples either practiced agriculture or made pottery. 172

In the next stage, beginning about the first century A.D., corn and pottery, which are almost always associated in North America, made their appearance. This indicates the beginning of a more or less sedentary agricultural population. The people who had these arts lived in the cave from the first century until about 1400 and seem to have been a part of the general Hohokam culture[2] which was spread widely over southern Arizona in this general period. The cave people's culture was, however, a local variation, and Haury has named it "Desert Hohokam" to differentiate it from the "River Hohokam," which is found at the famous site of Snaketown on the Gila River. There are remains of two periods of the Desert Hohokam culture in the cave. Corn and a plain brown pottery were found, characteristic of the earlier period which extended until A.D. 1100. Evidences of the later era (which is the true Desert Hohokam and the period of the greatest population) were also found: human mummies, cotton textiles, woven sandals, and baskets, all of which made possible correlation with the River Hohokam culture. Each of these periods is divided into phases, and they are correlated with phases of the River Hohokam.

The irrigation ditch leading from the foothills of the Baboquivari Mountains to fields near Valshni Village (an archeological site in the Sells District) was evidently constructed during the "Sells Phase," about A.D. 1250–1400. This ditch was probably intended to catch and control the flood waters of the mountains and bring them to the cultivated lands. The culture of this phase was rather highly developed and ended, it is estimated, about 1400.

The hiatus between 1400 and 1694, the earliest date in Papago recorded history,[3] has been called a "dark age," because there is as yet no evidence of a prevailing culture. It is perfectly possible that earlier occupants of the area survived up to the historical period. In Ventana Cave there is no evidence to the contrary. Changes in the culture might have come through the process of normal invention and contact. This belief was reinforced recently by a specialist in the scientific study of corn,[4] who stated that Papago corn shows botanical characteristics of having been grown in the same environment and by the

2. "Hohokam" is the Piman word for "finished" or "gone." This culture is also called "Red on Buff" from its distinctive pottery. The people of this culture, who were termed by Gladwin "the earliest farmers in Arizona," built canals to water their fields (see W. J. and H. S. Gladwin, *The Eastern Range of the Red on Buff Culture*, esp. p. 277).

3. Manje, Father Kino's military escort, made a trip through the country in that year.

4. Dr. Edgar Anderson, of the Missouri Botanical Gardens, chairman of the Department of Botany, Washington University, St. Louis, Mo.

4: Joseph et al D, E-5 (1942-1943) 1949
NU28 Papago NU28

172 same people for many centuries. The occupants of Ventana Cave grew the same type of corn a thousand years ago. This suggests a continuity of the Hohokam culture through the Papago, because new immigrants would almost certainly have brought in some new strains of corn.

SPANIARD AND APACHE

175 The second period of Papago history begins with the first journey of the 197 Jesuit priest, Father Eusebio Francisco Kino, through Papaguería in 1698. It ends shortly after 1870, when the Papago came under the nominal control of the Indian Agent on the Pima Reservation. These one hundred and seventy-five years coincide roughly with the duration of the Apache wars.

More than a century before Father Kino's arrival at the border of Papaguería, Jesuit priests, in company with soldiers and civil officials of Spain, had started their work on the northwestern coast of Mexico. In some places the conquest was cruel and bloody; in others the priests and soldiers were welcomed. Slowly they advanced northward, "reducing" the Indians in one river valley after another. In 1687 Kino finally reached the region that is now northern Sonora, where he settled and established missions.[5] Kino looked toward the north as the great unknown, and he heard about bands of Apaches to the east who had already begun to raid the villages along the San Pedro and Santa Cruz rivers. Eventually he was able to explore this country to the north of him, making several journeys through the heart of Papaguería.

Father Kino was quite aware that he was meeting Indians of more than one tribe on his travels, even though the tribes were much alike culturally and spoke closely related dialects. In his journal and reports he mentions five different groups with whom he visited. They all spoke dialects of the Piman language. These groups were, as he called them: (1) the "Pima proper," who lived nearest the Spanish settlements in northern Sonora, on the upper waters of the several rivers which head there; (2) the Sobaípuri (or Soba y Jípuri), north of the "Pima proper" along the San Pedro and Santa Cruz rivers; (3) the Gileño, along the Gila River to Gila Bend; (4) the "Papago" in the desert between these rivers as far west as the Growler Mountains; and (5) the Soba, along the Lower Altar and San Ignacio rivers and the Gulf of California coast[6] (see Map II). It has been estimated that the Papago as a whole (including all these groups) numbered about 10,000 in 1700.[7] Some of these people Kino saw only briefly; with others he had a long acquaintance.

5. The portion of history dealing with Father Kino and the Jesuits is taken largely from Herbert Bolton, *Rim of Christendom*, chaps. xiv–xxx.

6. *Ibid.*, pp. 246–48. See pp. 66 ff. for present distribution of these groups.

7. Carl Sauer, *Aboriginal Population of Northwestern Mexico*, p. 32.

7: Lumholtz N-5 (1909-1910) 1912
NU28 Papago NU28

morrow in the afternoon, and some will not return until 231
the third day." It was the hottest time of the year—the [132]
end of June.

Three miles from here, just about where the llano 361
begins, there rises a small hill, four hundred feet high, 172
called La Ventana. On the west side it has been fortified by the ancient people with half a dozen or more stone walls of the usual description. The walls are perhaps more massive than is the case at most places. The fortifications had a remarkably fresh look about them, as if they had been in recent use. On top, where blocks had been broken off to form walls and parapets, the underlying rock still looked as untouched by the hand of time as if the work had been done within two years. Circular or square enclosures of the usual type are seen on a natural terrace near the top. A fairly well constructed track leads up to the summit where a rattlesnake was resting in a cool cavity. A ground-squirrel was noticed, and on the hill-side two camping places of the gray fox were observed, each under a small bush, the ground having been worn quite smooth.

The vast plain is impressive from the top; the ranges, 133
enveloped in a blue haze, appeared small, Comobabi and Quijotoa in the north-west being the nearest. To the right of the Comobabi Range, in one place only, toward north north-west, the view was unobstructed as far as the eye could see. In the south-west the small hills near Sonoita were visible. The many arroyos on the west side of the Baboquivari Range are worthy of note; they are short, quite deep, and impossible for wagons to cross

7: Lumholtz N-5 (1909-1910) 1912
NU28 Papago NU28

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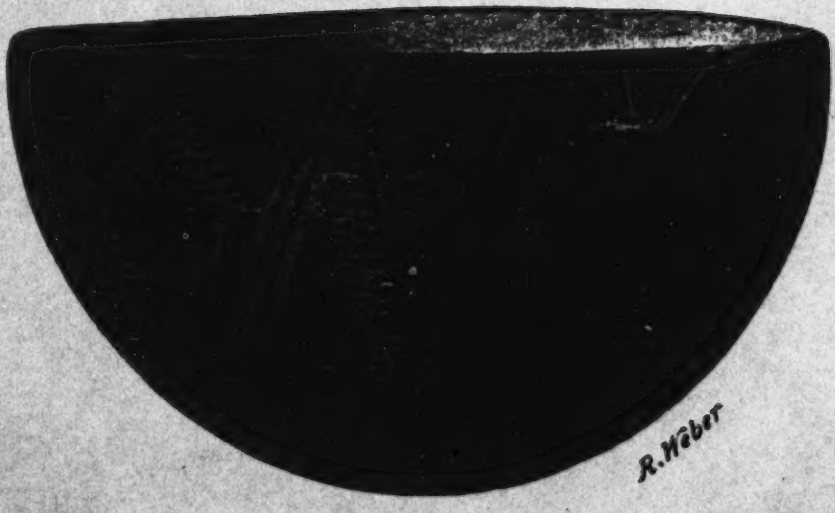
●172

Height, 6.5 ctm.



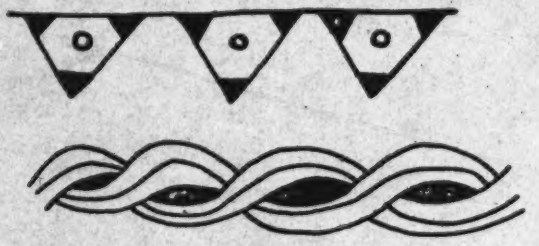
Height, 11.4 ctm.

ANCIENT POTTERY VESSELS OF THE PAPAGUERIA. EXCAVATED BY PAPAGO INDIANS NEAR FRESNAL, ARIZONA

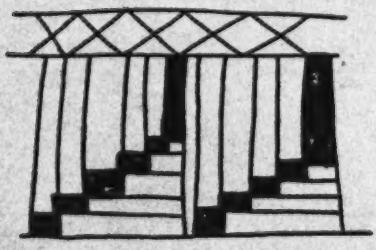
[Facing p. 170]

12: Hill Y-5 (ca. 1940) 1942 NU28 Papago NU28

In the Arisona State Museum at Tucson are bowls of two kinds—one a shallow type with straight sides, and the other smaller, with a more rounded outline. Additional forms include straight-sided jars, a zoomorphic vessel in the shape of a duck (?),



Designs on Modern Papago pottery



Designs on old Papago pottery

and ollas somewhat larger than those observed at Santa Rosa. Some of these examples represent modern types. The widespread use of pottery among the Papago has been greatly modified since the entry of American settlers into the neighboring regions.

GERTRUDE HILL.

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